CHEMISTRY 1212 General Chemistry Laboratory FALL 2009

Section 4: M W 7:40 – 10:30 Section 2: T Th 9:10 –12:00 Section 6: M W 10:40 – 1:30 Section 3: T Th 1:40 – 4:30 Section 5: T Th 4:40 – 7:30 PM

Dr. Linda R. Allen (Sec. 2, 3, 4)

Office: 105 Choppin

Office Hours: TW Th 2:00-3:30 PM

and by appointment

Phone: 578-3954 or 578-2940

email: LAllen3@lsu.edu

Dr. Patrick Kolniak (Sec. 1, 5, 6)

Office: 231 Choppin

Office Hours: MW 10 - 12

and by appointment

Phone: 578-4468 or 578-2940

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email: ChKoln@lsu.edu

Course web page: http://chemistry.lsu.edu/lallen/1212.html

Course Description: Selected experiments in general chemistry and introductory qualitative inorganic analysis. Prereq.: Credit or registration in CHEM 1002, 1202, or 1422. Lab usage deposit.

* Course Objectives:

- 1) To further chemical knowledge and experience through experimentation.
- 2) To learn how to work safely in the laboratory.
- ★ Text and Materials Required for Each Experiment: 1) Chemistry 1212 General Chemistry Lab Manual, Sixth Edition, Hayden-McNeil Publishing, Inc. 2) Laboratory Notebook, 3) safety goggles, 4) lab apron or lab coat and 5) scientific calculator. NO graphing calculators, PDA's or cell phones allowed on the quizzes or exams.
- ❖ Attendance: Attendance is required for ALL scheduled laboratories. In case of an absence, you are still responsible for the material covered. There is an Alternate Experiment & Quiz at the end of the semester to substitute for one missed experiment and quiz. See schedule for date of the Alternate Experiment.

If illnesses or emergencies force you to miss <u>more than the one experiment</u>, you must bring documentation to your instructor (Dr. Allen or Dr. Kolniak). If approved, the missed experiment will be prorated. ALL DOCUMENTATION MUST BE TURNED IN WITHIN ONE WEEK AFTER YOUR ABSENCE(S).

Missing lab to attend a review session or to take an exam in another course <u>does</u> not count as an excused absence.

- ❖ Any student with a documented disability is requested to speak with the Office of Disability Services (112 Johnston Hall) as early in the semester as possible. Students receiving accommodation letters must submit the letters to your instructor at least 3 days prior to an exam to discuss your accommodations.
- ❖ <u>Lab Usage Deposit</u>: With this course, you are charged a \$20 lab usage deposit. This deposit is to cover expenses in the lab for consumable materials and any individual breakage/missing equipment. In addition, you will purchase your goggles, apron, and towel through this deposit. The refund of any remaining money is processed after completion of course.

<u>Course Evaluation</u>: Your grade is based on your performance on graded work (notebook, quizzes and exams) in this class; NOT on "how hard you worked, NOT on well you performed the experiments, and NOT on your "need" to get a certain grade to keep a scholarship.

❖ Course Grade =

Lab Notebook Ave. + Quiz Ave. + (Midterm Exam x 0.30) + (Final Exam x 0.30)

Grade Assignments:

$$92.0 - 100 = A$$
 $82.0 - 91.9 = B$ $70.0 - 81.9 = C$ $60.0 - 69.9 = D$ Below $60 = F$

- Lab Notebook: The lab notebook has the feature of making carbonless copies. You'll record your observations, calculate any results, and discuss the results in your lab notebook. The copy sheet is turned in <u>before</u> leaving the lab for the day. Each experiment is graded separately and worth 30 points. See Laboratory Notebook section in the lab manual. At midsemester and at the end of the semester, the average of your notebook scores will be used in determining your grade as shown in the equation above.
- Quizzes: A short 10 point quiz covering the previous lab and the current lab will be given at the beginning of each lab. This serves as a way of making sure you have prepared for the current lab AND that you have learned the previous material. Students who arrive late and miss the quiz will be given a zero. At midsemester and at the end of the semester, the average of your quiz scores will be used in determining your grade, as shown in the equation above.
- Midterm Exam: This exam is a regular exam (closed notebook/manual) given during regular lab time. See schedule for exact date. At midsemester, this exam will be 60% of the overall grade; however at the end of the semester, this exam will be 30% of your overall grade, as shown in the equation above.
- Final Exam: This exam is a comprehensive lab practical exam (use of lab notebook only) covering material for the entire semester. This exam is given during lab time the last week of scheduled classes. See schedule for exact date. At the end of the semester, this exam will be 30% of your overall grade, as shown in the equation above.

> SAFETY:

Safety is EXTREMELY IMPORTANT in all laboratories.

ALL students must obey ALL safety rules. All students are required to read and understand the first experiment in the lab manual, Safety in the Laboratory. A review of safety practices will be discussed in the first lab meeting.

Failure to obey safety rules during the semester will result in deduction of points from the subjective portion of your laboratory notebook grade. Repeated violations will result in dismissal from the lab and/or the course.

Cell phones should be turned off, or if needed for emergency calls, turned to silent mode. Your attention needs to be 100% on the experiment.

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CHEM 1212 Tentative Schedule Fall 2009

Monday	Tuesday	Wednesday	Thursday
Aug. 24	Aug. 25	Aug. 26	Aug. 27
← Sign In		← Safety &	Check-In ——→
Aug. 31	Sept. 1	Sept. 2	Sept. 3
←— Phys. & Chem.	Properties $(#1) \rightarrow$	← Synthesis of	Alum (#2) ——→
Sept. 7	Sept. 8	Sept. 9	Sept. 10
	← No Labs→	← Class. Chem Rxn	in Cu Cycle (#3) \rightarrow
Sept. 14	Sept. 15	Sept. 16	Sept. 17
← Citric Acid in	Fruit Juices (#4)→	← Vitamin C in	Fruit Juices (#5) →
Sept. 21	Sept. 22	Sept. 23	Sept. 24
← Limiting Reagent	Determin. (#6) \rightarrow	← Deter. % Comp.	of H_2O_2 (#7) \rightarrow
Sept. 28	Sept. 29	Sept. 30	Oct. 1
← Identification of	Food Dyes (#8) \rightarrow	← No Labs →	Fall Holiday
Oct. 5	Oct. 6	Oct. 7	Oct. 8
← Determin, of	Aspirin (#9) —→	Freezing Pt of	Antifreeze (#10) →
Oct. 12	Oct. 13	Oct. 14	Oct 15
← Midterm	Exam — — —	← Acidic, Basic, &	pH Prop. (#11) →
Oct. 19	Oct. 20	Oct. 21	Oct. 22
← Qual Grps 1 & 2	Known (#12) \rightarrow	← Qual Grps $1 \& 2$	Unknown (#13) →
Oct. 26	Oct. 27	Oct. 28	Oct. 29
	Known (#14) →	←— Qual Group 3	Unknown (#15) →
Nov. 3	Nov. 3	Nov. 4	Nov. 5
← Sp. Heat & Heat	of Rxn (#16) \longrightarrow	Chemical	Equilibria (#17) →
Nov. 9	Nov. 10	Nov. 11	Nov. 12
← Rates of		←— Various Redox	Rxns (#19) ——→
Nov. 16	Nov. 17	Nov. 18	Nov. 19
←Syn & Pur. Coord.	Compd (#20) →	← Alternate Lab	(# 21) ————
Nov. 23	Nov. 24	Nov. 25	Nov. 26
←— Check-Out &	TA Evaluation—→	← No Labs →	Thanksgiving →
Nov. 30	Dec. 1	Dec. 2	Dec. 3
← No Labs→	← Lab	Final ——→	← No Labs →